Clean Water Act
40th Anniversary

First Quiz

Next Thursday, October 14 – During discussion sections

- Open Book
- You will have a 4-hour window (4:00 to 8:00 pm) during which you can begin the quiz, with 50 minutes to complete it once you start.
- The quiz MUST be completed by 8:00 pm (do not start later than 7:10 pm!)
- Please email us if you require additional accommodations.

CWA Goals and Milestones

"Fish Killed by Water Pollution"
Nat'l Archives and Records Admin.
Photo by Bill Gillette, U.S. EPA,
June 1972

- Goal: restore and maintain the chemical, physical, biological integrity of our nation's waters
- Milestones:
  - Achieve fishable and swimmable waters by 1983,
  - Eliminate the discharge of pollutants into navigable waters by 1985, and
  - Prohibit the discharge of toxic pollutants in toxic amounts

earth LAW CENTER

What Activities are Regulated?

- Any discharge of **pollution** from a **point source** to a **water of the U.S**.
- Pollution = any amount of human made or human induced alteration of chemical, physical, biological or radioactive integrity of water.
- Point Source = any discernible, confined and discrete conveyance.
  - Like a pipe or a channel.

National Pollutant Discharge Elimination System – How Permits Protect Waters

- Required for any person who discharges or proposed to discharge pollutants to waters of the U.S. has a duty to apply for an NPDES permit. (40 CFR 122.21.)

- An NPDES permit will generally specify an acceptable level of a pollutant or pollutant parameter in a discharge (for example, a certain level of bacteria).

National Pollutant Discharge Elimination System – How Permits Protect Waters

- Facilities with Clean Water Act Permits must achieve:
  - Technology Based-Limitations
  - Any more stringent limitations necessary to achieve Water Quality Standards
    - Water Quality-Based Effluent Limits
    - Total Maximum Daily Loads
    - Typically become more stringent over time (as science improves)
  - CWA is “technology-forcing”

Technology-Based Requirements

- Generally, new sources are regulated more stringently than existing ones.
- Dangerous pollutants are regulated more stringently than less dangerous ones.
- Can vary by industry because of different challenges of each industry in achieving compliance.

Water Quality Requirements

- Based on Water Quality Standards
- Limitations in permits must control all pollutants which are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard (numeric or narrative criteria)
- **Generally *not* dictated by economic considerations.**

Monitoring Requirements

- Permits also must require monitoring – including type, intervals, and frequency – sufficient to yield data which are representative of the monitored activity;
- The mass (or other measurement specified in the permit) for each pollutant limited in the permit;
- The volume of effluent discharged from each outfall;
- Can include receiving water monitoring;
- Must follow approved methods.

Stormwater Runoff: CWA Section 402(p)

Dan Marschka

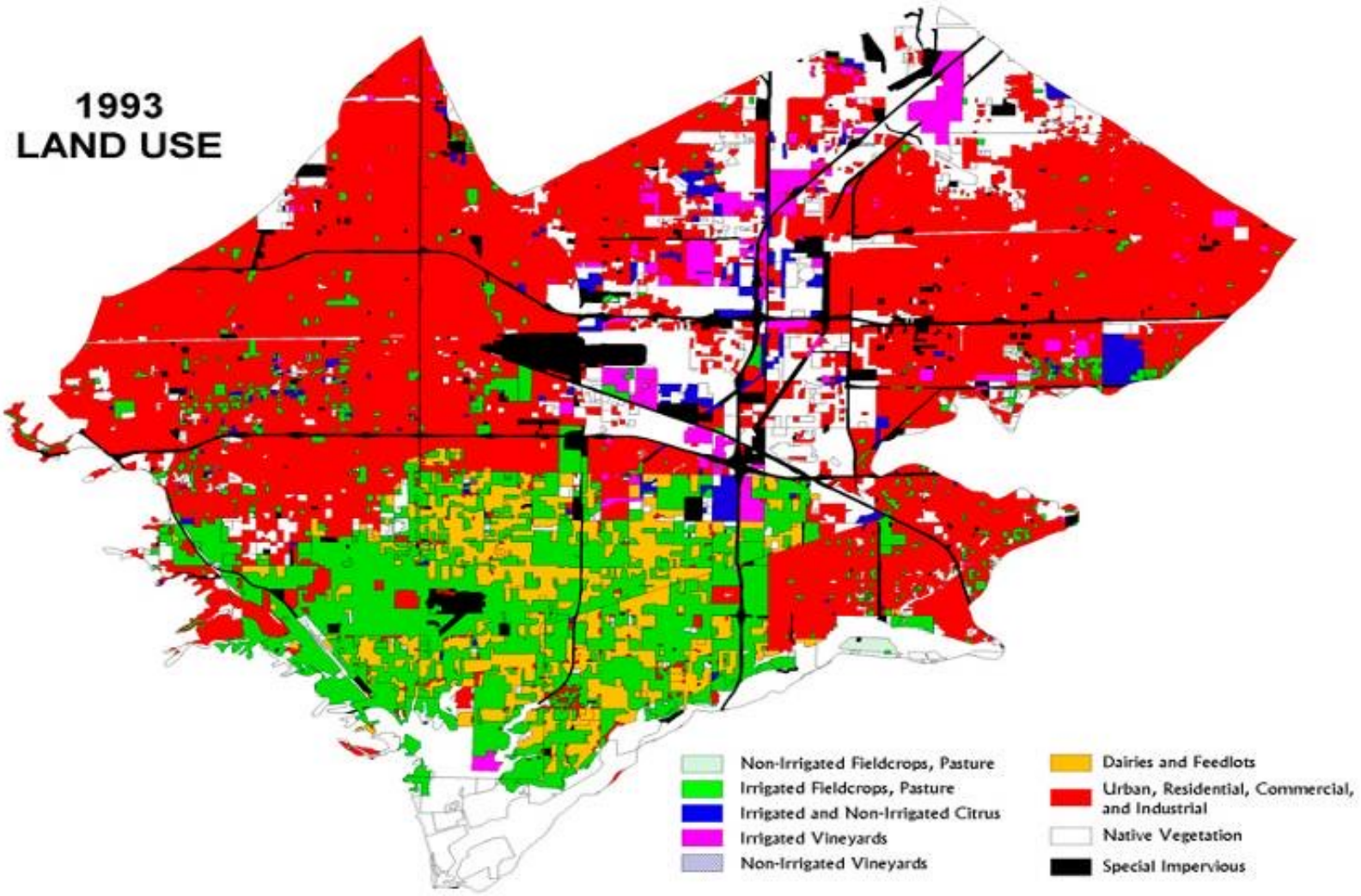
California Coastal Commission

Hannah Arista Photography

Stormwater Runoff: CWA Section 402(p)

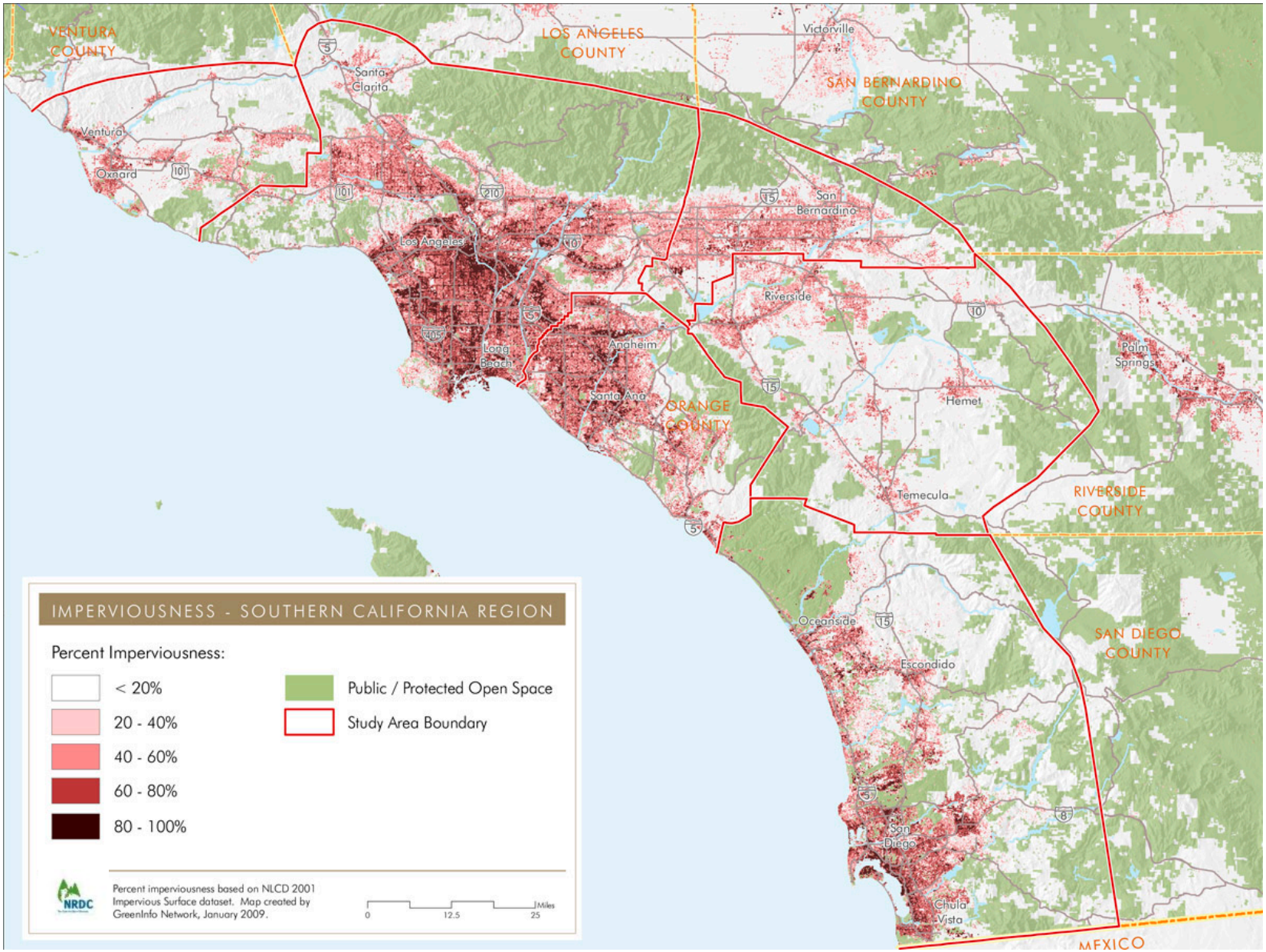
- Clean Water Act was amended in 1987 to include regulation of stormwater and urban runoff.
- Industrial and Construction activities must strictly comply with WQS.
- For Municipal sources, the permitting authority must require compliance with best management practices and/or compliance with water quality standards. A lot of debate in this area.
  - Narrative v. Numeric
  - BMP v. Effluent limits
  - BMP approach where numeric limits "not feasible." 40 CFR 122.44(k)
- Less flexibility for dry weather (effectively prohibit non-stormwater discharges) or where TMDLs have been developed.

Land-Use in the Chino Basin



Wildermuth Environmental

Impervious Surface



"Dredge and Fill" Permits

Photo from Prairie Rivers Network

- Permits issued by Corps of Engineers, subject to guidelines developed with EPA and subject to EPA oversight
- No permit if less damaging practicable alternative exists
- No permit if activity would significantly degrade water resources.
- Permits can be individual (larger projects) or general (pre-approved activities with minor impacts)

What happens when permits fail?

Total Maximum Daily Loads

- Develop “total maximum daily loads” of pollutants that water segment can receive and still meet water quality standards
- A TMDL is a sum of:
  - Waste load allocations (WLA) - Total amount of pollutant from existing point sources
  - Load allocations (LA) - Total amount of pollutant from existing nonpoint sources and natural background
  - Margin of safety (MOS) - To account for uncertainty; can be expressed as an explicit (e.g., 10% of total load) or implicit factor (e.g., use of conservative modeling)
- This is the “backstop” when other measures have failed.

Enforcement

Construction stormwater permit Violation
(Russian Riverkeeper)

- Citizen enforcement: can obtain injunctions to prevent violations; can recover civil penalties (awards go to government) and attorneys fees
- Injunctive relief (required to correct the violation)
- Civil penalties: up to $25,000 per day of violation for first offense; up to $50,000/day for second offense
- Criminal penalties – show fault (*e.g.* bypassing treatment)

What Waters are Protected? The "WOTUS" Problem

- Navigable Waterways (are, were or could be used in interstate or foreign commerce, or subject to ebb and flow of the tide)
- Wetlands adjacent to navigable waterways
- Non-navigable tributaries of navigable waters that are relatively permanent (flow year round or have continuous seasonal flow).
- Wetlands that are adjacent to those tributaries.

. . . What's missing?

Examples:

The Los Angeles River

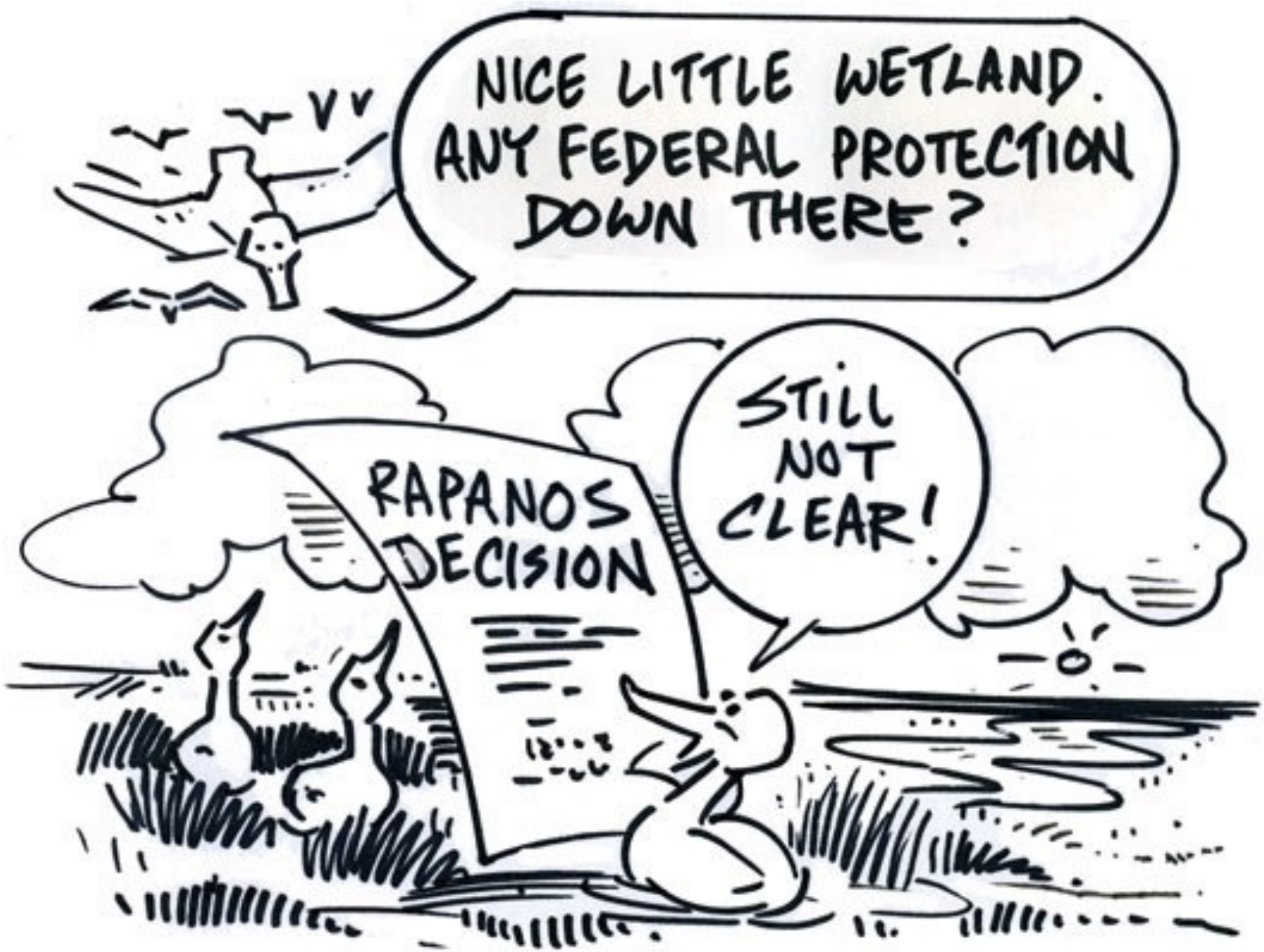
©Peter Bennett/citizenoftheplanet.com

Supreme Court decision in *Rapanos v. United States*, 547 U.S. 715 (2006) raised questions about scope; e.g., intermittent streams, isolated waterways or wetlands…

Four Justices: the Clean Water Act protects wetlands "with a continuous surface connection" to navigable water.

One Justice (Kennedy - the swing vote!): there needs to be a "significant nexus" with navigable waters – defined as situations when the wetlands "significantly affect the chemical, physical, and biological integrity of other covered waters."

Wetlands are not under government jurisdiction when the effect on water quality is "speculative or insubstantial."


NICE LITTLE WETLAND. ANY FEDERAL PROTECTION DOWN THERE?
RAPANOS DECISION
STILL NOT CLEAR!

THE CLEAN WATER RULE Guaranteed Protections

1

Traditionally navigable waters

Things appropriate for commercial navigation, but that can include commercial recreational navigation.

2

Interstate waters

Exactly what you'd think – anything that crosses state lines.

3

The Territorial Seas

Coastal waters out to 3 miles.

4

Impoundments of waters that are otherwise covered:

Things like reservoirs behind dams of protected waters.

5

Tributaries to traditional navigable waters, interstate waters and territorial seas

Contributes flow downstream to these waters and has indications of regular flow, namely bed and banks and ordinary high water mark.

6

Waters adjacent to categories 1-5. Adjacent means a water body is:

Within 100 feet of the ordinary high water mark of any of above waters;

Within the floodplain of any of the above waters, but not beyond 1,500 feet if the floodplain extends more than 1,500 feet; or

Within 1,500 feet of the high tide line of a traditionally navigable water or the territorial seas, or the ordinary high water mark of the Great Lakes.

Lawyered!

13 states and industry groups sue – 6th Circuit Court of Appeals blocks the rule.

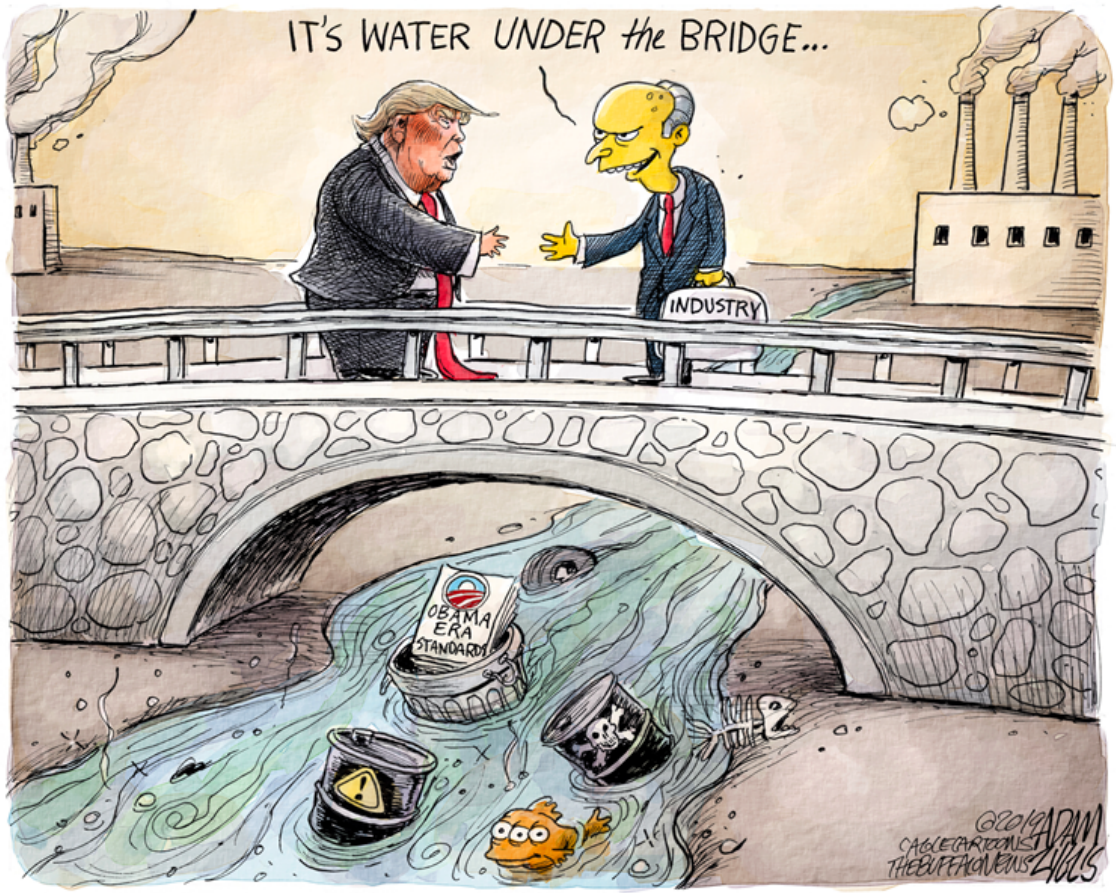
- Overruled by Supreme Court! Cannot bring lawsuit directly in an Appellate Court – process has to go through District Court first.

2018 – Trump Administration, under David Ross at EPA (formerly represented Wyoming in 2015 in a lawsuit against EPA over interpretation of "WOTUS"!) suspends the 2015 Clean Water Rule. Issues a new version that USGS estimates would remove federal protections for 18 percent of stream and river miles and 51 percent of wetlands in the United States.

- Surprise! Fifteen states, two cities and environmental organizations have sued. . .

Trump Administration repeals WOTUS rule in September 2019 (lawsuits follow…)

- April 2020 – Navigable Waters Protection Rule (also known as the "Dirty Water Rule" – drastically narrows the scope of waters receiving protection (particular problem for ephemeral streams and wetlands).



Lawyered!

August 30, 2021
6:31 PM PDT
Last Updated a month ago

United States

U.S. judge vacates Trump water rule on environmental grounds

2 minute read

Reuters

Visitors float along the Merced River on the Fourth of July weekend in Yosemite National Park, California, U.S., July 2, 2021. REUTERS/Tracy Barbutes

WASHINGTON, Aug 30 (Reuters) - A U.S. court on Monday vacated the Trump administration's scaled back clean water rule that had limited the number of waterways that could be federally regulated because leaving it in place could harm the environment, restoring previous protections.

Arizona district court judge Rosemary Marquez said that leaving the Trump administration's Navigable Waters rule in place while the Biden Environmental Protection Agency and Army Corps of Engineers work on their own rulemaking could lead to "serious environmental harm" and that the Trump rulemaking

100 percent of California's surface water systems are overallocated…

Whiskey is for drinking… water is for fighting.

- Mark Twain

CALIFORNIA
©MATSON
caglecartoons.com

Pueblo Los Angeles

Upper Los Angeles River Basin

KCET

California Water Map
Thirst Edition
River
Pumped River
Diverted River
Jay Lund
http://watershed.ucdavis.edu
Flow to the Sea
Biggish River
Thirsty Place
Thirsty Place
Flow to the Sea
The Delta
Thirsty Place
Thirsty Place
Former River
Thirsty Place
Former Lake, Thirsty Now
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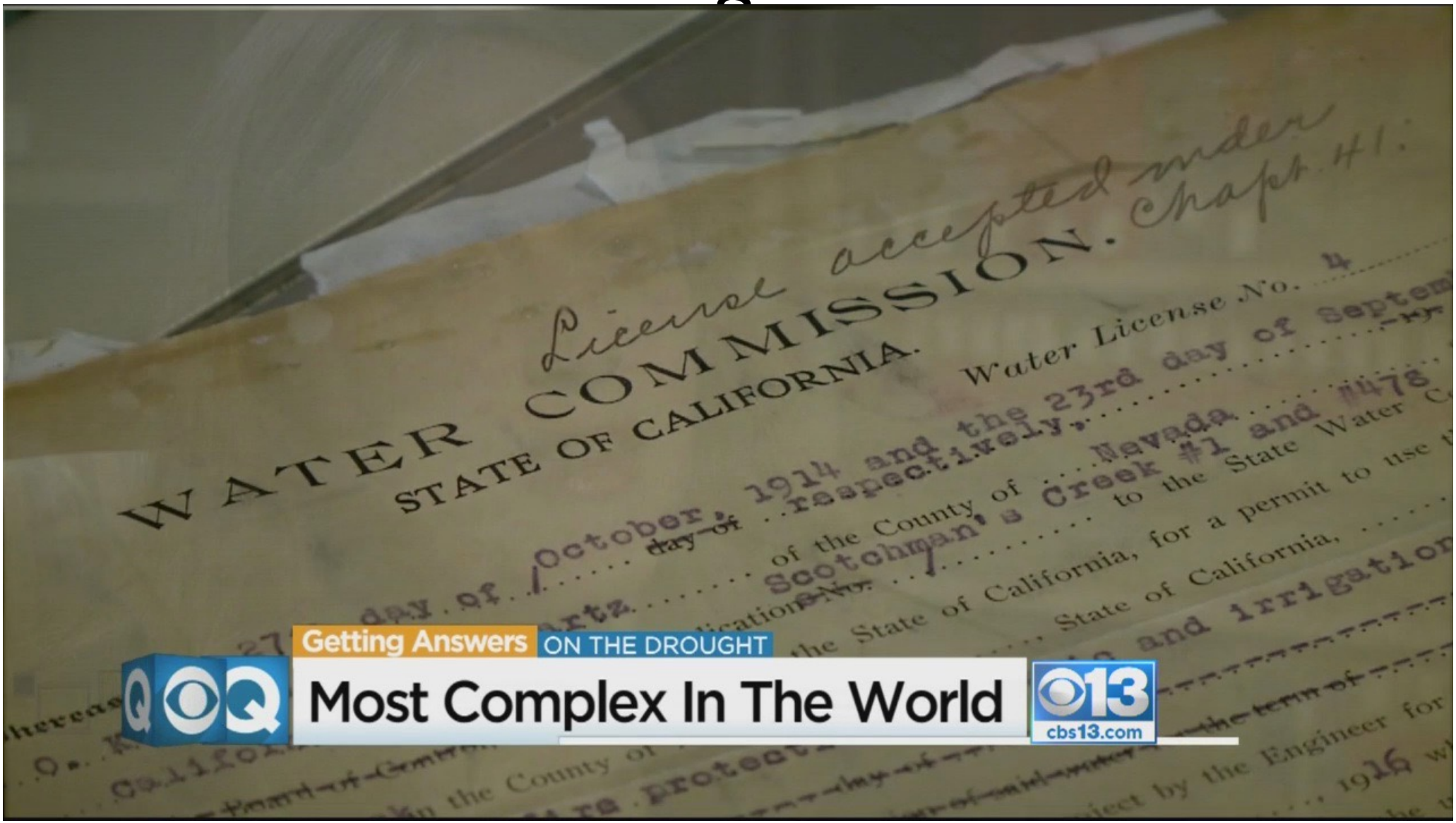
UCDAVIS
CENTER FOR WATERSHED SCIENCES

California Water Rights:

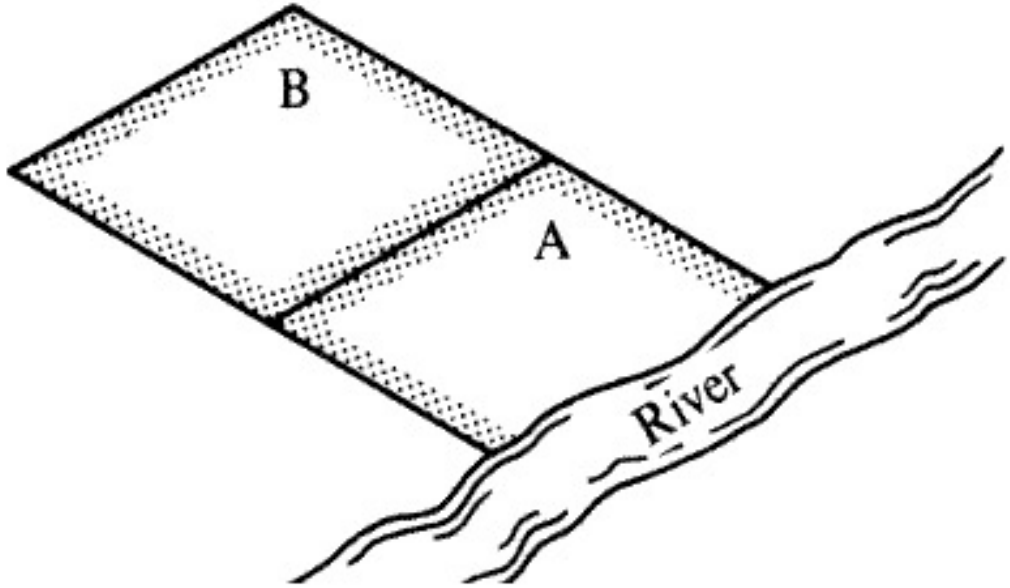


Collection of Oakland Museum of California

Surface Water…

Randall Benton/Sacramento Bee/ZUMA

Riparian Rights – Eastern U.S. (British Common Law)

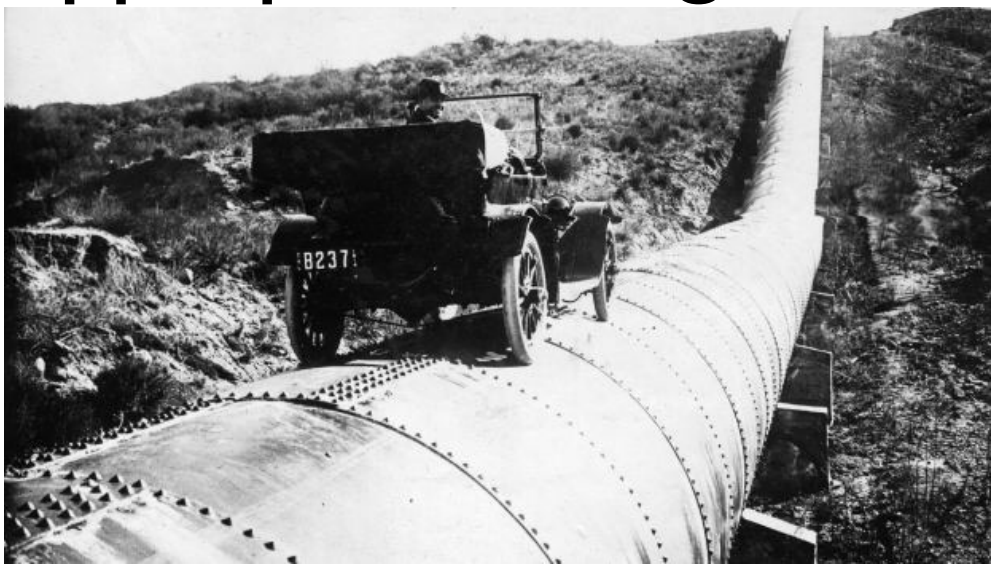


- Correlative – must be *reasonable* with respect to correlative use of other riparian users – do no harm.
- Right is to the natural flow of the river – no right to impound and store the water.
- Must be used on-site (sort of). But aren't lost by non-use.

Prior Appropriation – (or why riparian rights are not a good fit in the west…)

- Appropriative rights are "first in time, first in right."
- Water diverted for use on non-riparian land.
- Right is based on use, not land ownership.
- Codified in California Code in 1872 – required written notice of the appropriation to the public.

Appropriative Rights – 1914



Getty Images

- Pre-1914 – only notice required (no permit)
- Water Commission Act of 1914 – permit required to appropriate water, and junior (later) rights holders are the first to give up water when in short supply.
  - Pre-1914 rights are common, but rights holder must demonstrate continuous use starting before 1914!

California recognizes *both* riparian and appropriative rights. Which is confusing…

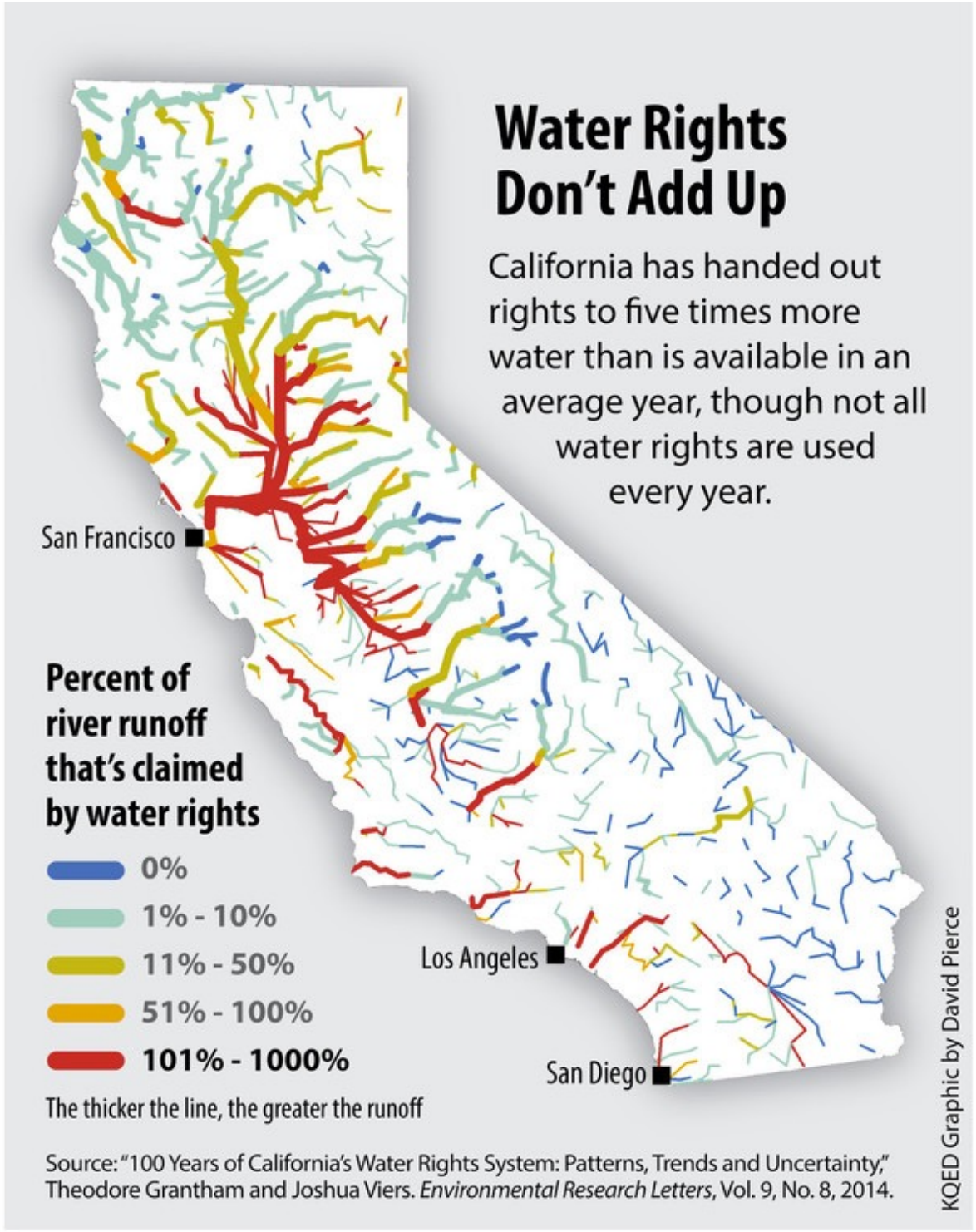
Riparian v. Appropriative – 3 simple Rules:

Lux v. Haggin (Cal. 1886) – Preexisting riparian rights trump a later appropriative right.

1) Both riparians: resolve according to reasonable use
2) Both appropriators: resolve by priority date
3) Appropriator vs. riparian: depends on date title to land acquired vs. date appropriation began. Earliest wins!

…Except, *Joslin v. Marin Municipal Water District* (1967) – Reasonable use governs conflicts between riparians and prior appropriators.

- But really meant to advance public interest…


Water Rights Don't Add Up
California has handed out rights to five times more water than is available in an average year, though not all water rights are used every year.
San Francisco
Los Angeles
San Diego
Percent of river runoff that's claimed by water rights
0%
1% - 10%
11% - 50%
51% - 100%
101% - 1000%
The thicker the line, the greater the runoff
Source: "100 Years of California's Water Rights System: Patterns, Trends and Uncertainty," Theodore Grantham and Joshua Viers. Environmental Research Letters, Vol. 9, No. 8, 2014.
KQED Graphic by David Pierce

But who owns the water?

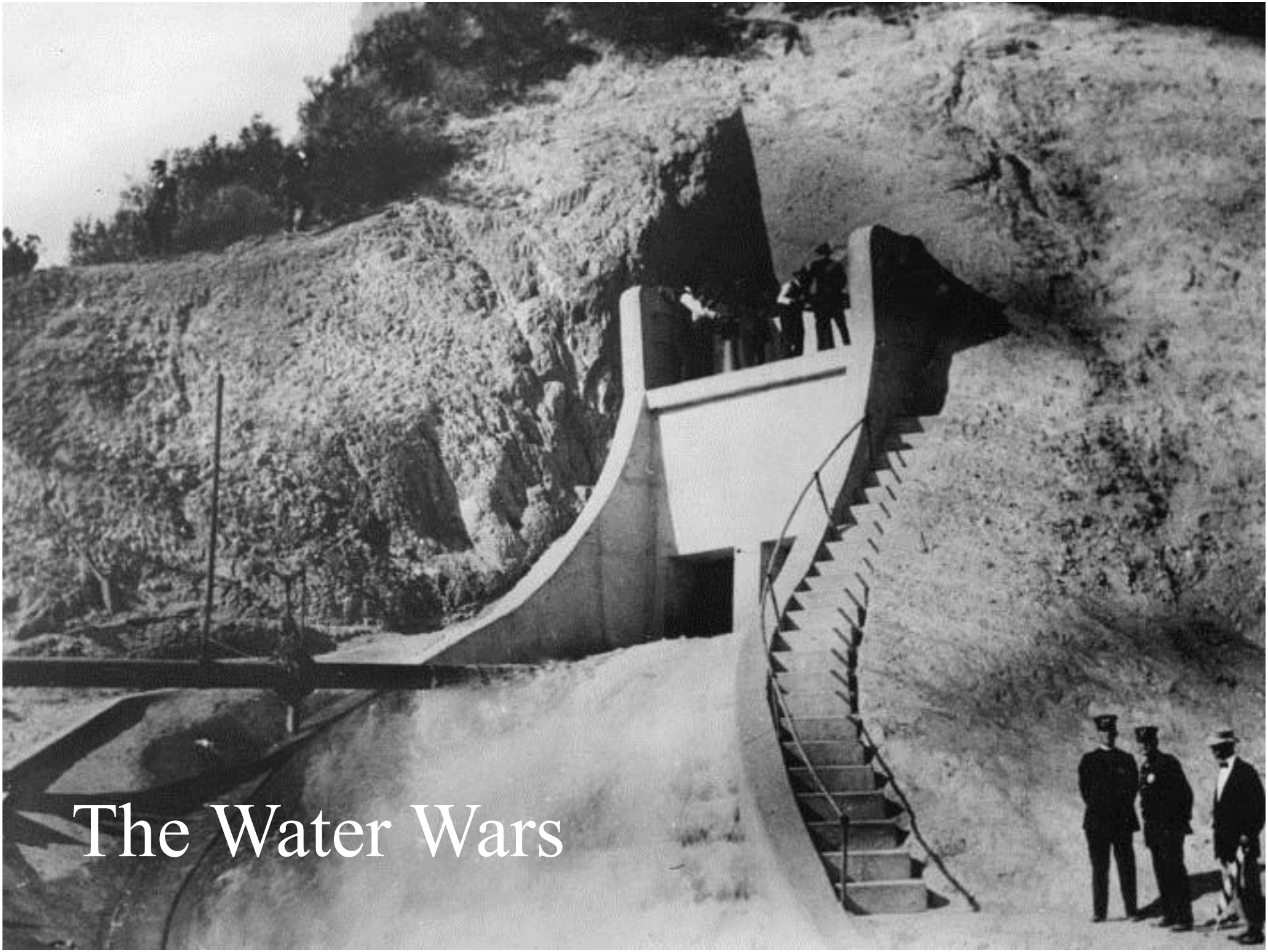
Cal. Water Code sect. 102:

"[all] water within the state is the property of the people of the state, but the right to the use of the water may be acquired by appropriation in the manner provided by law."

- *Eddy v. Simpson (Cal. 1853)* "the right of property in water is usufructuary, and consists not so much of the fluid itself as the advantage of its use."

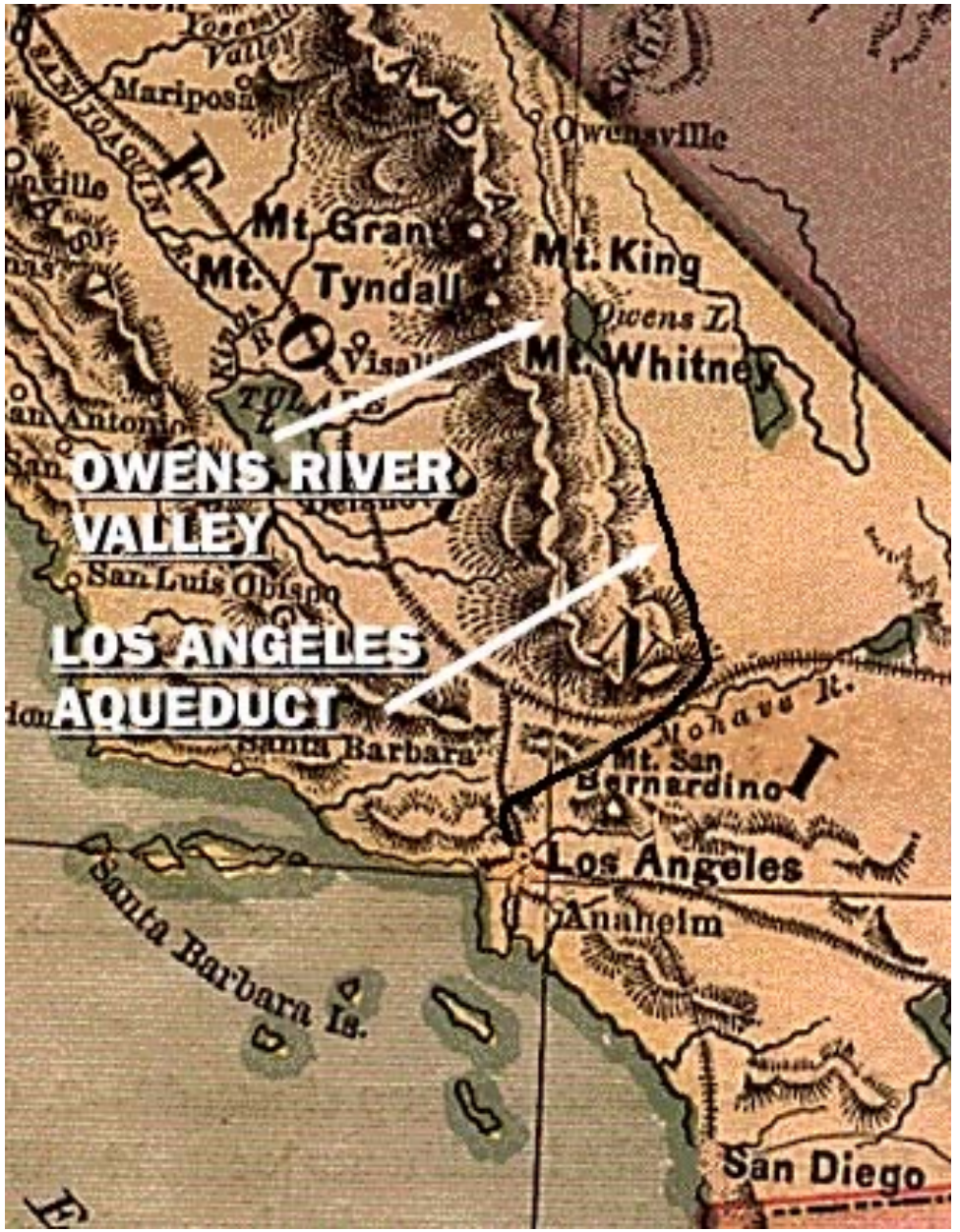
Water rights in CA are rights to *use* – not an ownership of the physical water.

- Water rights in California are not like real property rights, and by their very nature are "limited and uncertain."
- As one author put it, California "water rights are -- and always have been – fragile."
- The result: "no water rights are inviolable; all water rights are subject to governmental regulation." (*United States v. State Water Board, Cal. App.*)


The Water Wars

Owens Valley:

- Growing agricultural hub (produce and livestock) north of Los Angeles in the late 1800's.



Drought from 1892-1904 threatens Los Angeles

Enter Fred Eaton and William Mulholland…

- Eaton becomes Mayor of Los Angeles, brings Water Company under City power. Mulholland continues to run it, sees lack of water as principal limitation on city's growth.

"If you don't get the water, you won't need it."

- *William Mulholland*

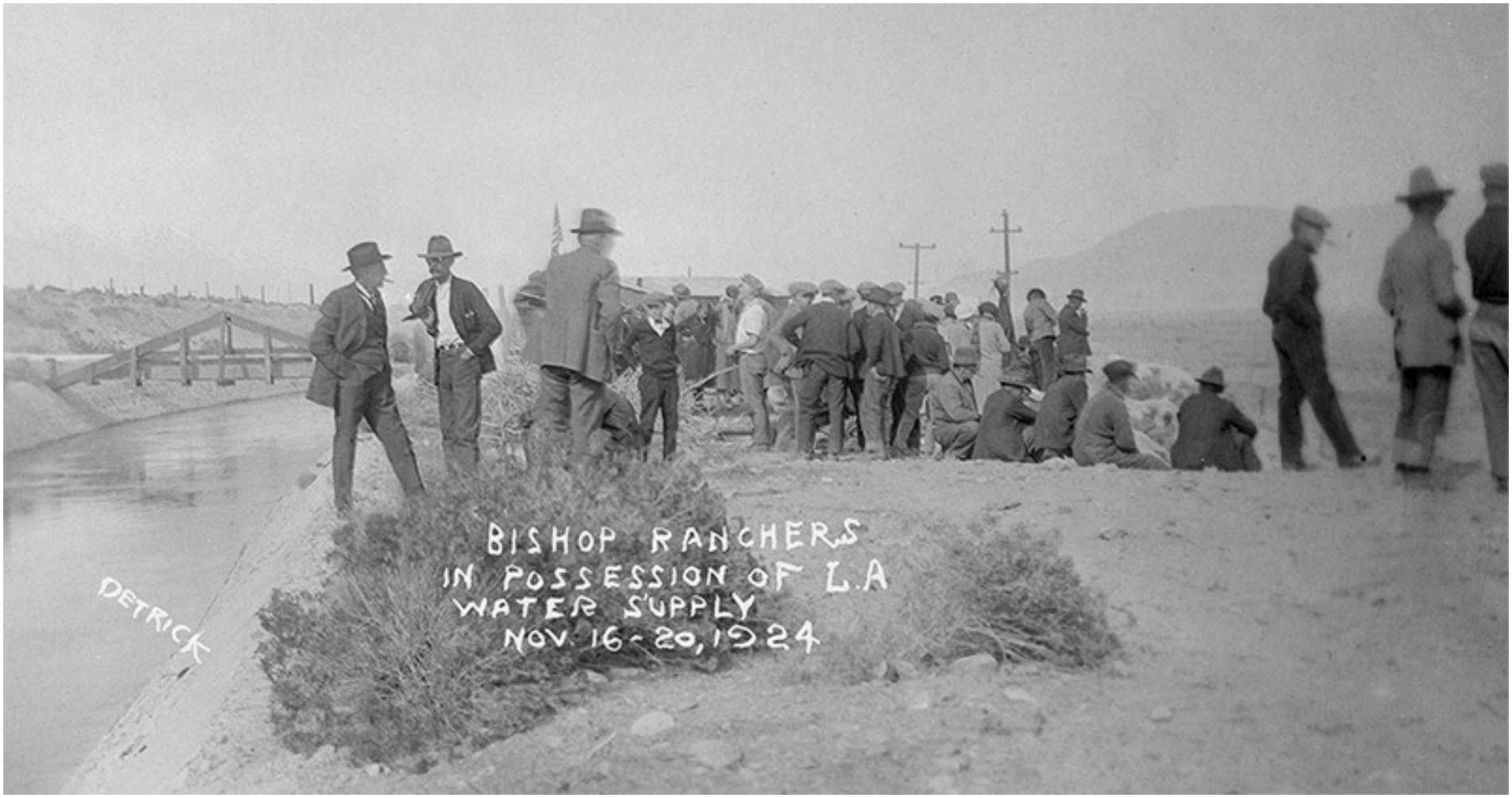
Federal Bureau of Reclamation planning to build an irrigation system for Owens Valley – would prevent LA from accessing water.

Eaton and Mulholland – begin buying land and water rights for the Owens River.

- The regional engineer for the Bureau of Reclamation (Joseph Lippincott had Eaton serve as a nominal agent for the Bureau – gains access to inside information.
- Lippincott was paid by Eaton as a private consultant!
- Mulholland misleads public about how much water LA actually has access to – whips up a frenzy of demand.

Aqueduct built from 1907-1913. Immediately begins to transform the Valley from lush agricultural lands to desert.

Owens Lake dries up by 1924



"There it is. Take it."

- Mulholland